

## INTERNATIONAL SEARCH REPORT

Rec'd PCT/PTO 25 JAN 2005

International application No.

PCT/JP03/10251

A. CLASSIFICATION OF SUBJECT MATTER  
Int.Cl<sup>7</sup> C01G3/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
Int.Cl<sup>7</sup> C01G1/00-23/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2003  
Kokai Jitsuyo Shinan Koho 1971-2003 Jitsuyo Shinan Toroku Koho 1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
CAS online

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	JP 2001-31419 A (Sumitomo Metal Mining Co., Ltd.), 06 February, 2001 (06.02.01), Description; page 2, right column, line 49 to page 3, left column, line 11 (Family: none)	1-2, 4 3, 5-13
X A	JP 05-262523 A (Sumitomo Metal Mining Co., Ltd.), 12 October, 1993 (12.10.93), Description; page 2, right column, lines 17 to 40 (Family: none)	6-13 1-5
X A	JP 47-40634 B1 (Nittetsu Mining Co., Ltd.), 14 October, 1972 (14.10.72), Description; page 1, left column, line 35 to right column, line 17; page 2, left column, line 41 to right column, line 28 (Family: none)	6-13 1-5

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

\* Special categories of cited documents:  
 "A" document defining the general state of the art which is not considered to be of particular relevance  
 "E" earlier document but published on or after the international filing date  
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 "I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
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 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
 "&" document member of the same patent family

Date of the actual completion of the international search  
06 November, 2003 (06.11.03)

Date of mailing of the international search report  
18 November, 2003 (18.11.03)

Name and mailing address of the ISA/  
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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 09-202619 A (Sumitomo Bakelite Co., Ltd.), 05 August, 1997 (05.08.97), (Family: none)	1-13
A	JP 07-53213 A (Sumitomo Metal Mining Co., Ltd.), 28 February, 1995 (28.02.95), (Family: none)	1-13.